

TWO NEW SPECIES OF AGERATINA (ASTERACEAE-EUPATORIEAE)

FROM NORTHCENTRAL MEXICO

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Preliminary preparation of a flora of northeastern Mexico (Nuevo Leon and Tamaulipas) has revealed the following new species of Ageratina. Recognition of these taxa within the latter genus instead of within the Eximbricata section of Eupatorium (sensu B. L. Robinson) follows the suggestions of King and Robinson (1970, 1972). Ageratina is a very large natural assemblage, species of which all have a base chromosome number of  $x = 17$ . Its recognition has a sound morphological basis (eximbricate involucres) and, because of its size (over 100 species), has high utility in herbarium arrangement for identification purposes.

AGERATINA NESOMII B. L. Turner, sp. nov.

A. rothrockii (Gray) K. & R. accedens sed foliis supremis alternatis, laminiis deltoideis irregulariter dentatis ut in A. rollinsii.

Fibrous-rooted perennial ca. 60 cm tall; stems puberulus. Leaves opposite below, becoming alternate above; blades deltoid, not glandular-punctate, 3-4 cm long, 3-4 cm wide, coarsely and irregularly dentate, obtuse to truncate at the base; petioles mostly 10-15 mm long. Capitulescence terminal, 3-6 headed, 3-4 cm across, 1-2 cm long. Heads white, 8-9 mm long. Involucre broadly turbinate, eximbricate; bracts linear-lanceolate, 6-7 mm long, sparsely puberulent. Receptacle plane, ca 1.5 mm across, glabrous, bearing 20-25 florets and an occasional pale within the outermost florets. Corolla 4-5 mm long; tube ca 1.75 mm long, glabrous, limb sparsely, if at all, flaring, ca. 3.25 mm long, glabrous except for the short lobes (0.7-1.0 mm) each of which are beset with 8-10, short, 2-3 septate hairs. Anthers ca. 2 mm long, the appendages acute, longer than wide. Styles 5-6 mm long, slightly swollen at the base, the branches ca. 2 mm long with linear, papillose, appendages. Achenes black, 2.8-3.2 mm long, sparsely hispid along the ribs; carpodium 4-sided, not merging into the ribs; pappus of ca. 30, readily deciduous, flattened, ciliate setae, 3-5 mm long.

TYPE: MEXICO. Neuvo Leon, 15 mi E of San Rafael off highway 57 in small valley (100° 26' x 25° 03'), pine forest with pine-yucca on higher and drier slopes, 22-23 Jul 1977, C. Wells & G. Nesom 152 (LL).

Additional specimens examined: Neuvo Leon. Municipio Galeana: ca 8 mi E of San Rafael, 4.4 mi E of LaBoca, ca. 2400 m, N facing hillside (100° 25' x 25° 03'), 22 Oct 1982, Sundberg et al. 1711 (TEX).

Ageratina nesomii is seemingly close to A. rollinsii, their habitat features being very similar. The former is readily distinguished, however, by its epunctate leaves, larger heads with larger florets, pubescent corolla lobes and longer anthers with appendages longer than wide.

On floral characteristics, however, I would relate A. nesomii to A. rothrockii which King and Robinson place in the subgenus Ageratina which is marked, in part, by its pubescent corolla lobes. The characters which distinguish between the subgenera Ageratina and Neogreenella are weak and appear to break down in the species complex centering about A. herbacea, A. rugosa, A. rothrockii, A. occidentale and yet other Ageratinoid species of northern Mexico.

It is a pleasure to name the species for Dr. Guy Nesom, Erigeron specialist whose collections from the gypsum areas of southern Nuevo Leon have been significant additions to our floristic knowledge of the region.

AGERATINA ROLLINSII B. L. Turner, sp. nov.

Ageratina herbacea (Gray) K. & R. accedens sed foliis supremis alternatis laminis glanduloso-punctatis subtus, phyllariis multioribus angustioribus.

Stoloniferous herbs up to 50 cm tall; stems puberulus. Leaves opposite below, becoming alternate above; blades ovate-deltoid, glandular-punctate, 2-5 cm long, 1.5-5.0 cm wide, coarsely dentate, abruptly narrowed into a winged or wingless petiole, 5-20 mm long. Capitulescence terminal, 5-20 headed, 2-5 cm across, 1-3 cm long. Heads white, ca. 7 mm long. Involucre broadly turbinate, eximbricate; bracts linear-lanceolate, 4-6 mm long, atomiferous-glandular intermixed with short incurved or appressed hairs. Receptacle slightly convex, glabrous, bearing 18-25 florets. Corolla ca. 3.5 mm long, atomiferous-glandular to glabrous; tube ca. 1 mm long; limb scarcely to abruptly

flaring, ca. 2.5 mm long; lobes 0.6-1.0 mm long. Anthers ca. 1 mm long, the appendages obtuse, wider than long. Styles ca. 5 mm long, swollen at the base, the branches ca. 2 mm long with decidedly papillose appendages. Achenes black, 2.0-2.5 mm long, rather conspicuously hispid-pubescent; carpodium not merging into the ribs; pappus of ca. 30, readily deciduous, flattened, ciliate setae, 2-3 mm long.

TYPE: MEXICO. Nuevo Leon. Chipinque Mesa, SW of Monterrey. Oak-pine woods, limestone area, 4400 ft, 16 Nov 1958, R. C. Rollins & R. M. Tyron 5875. (Holotype LL; isotype GH).

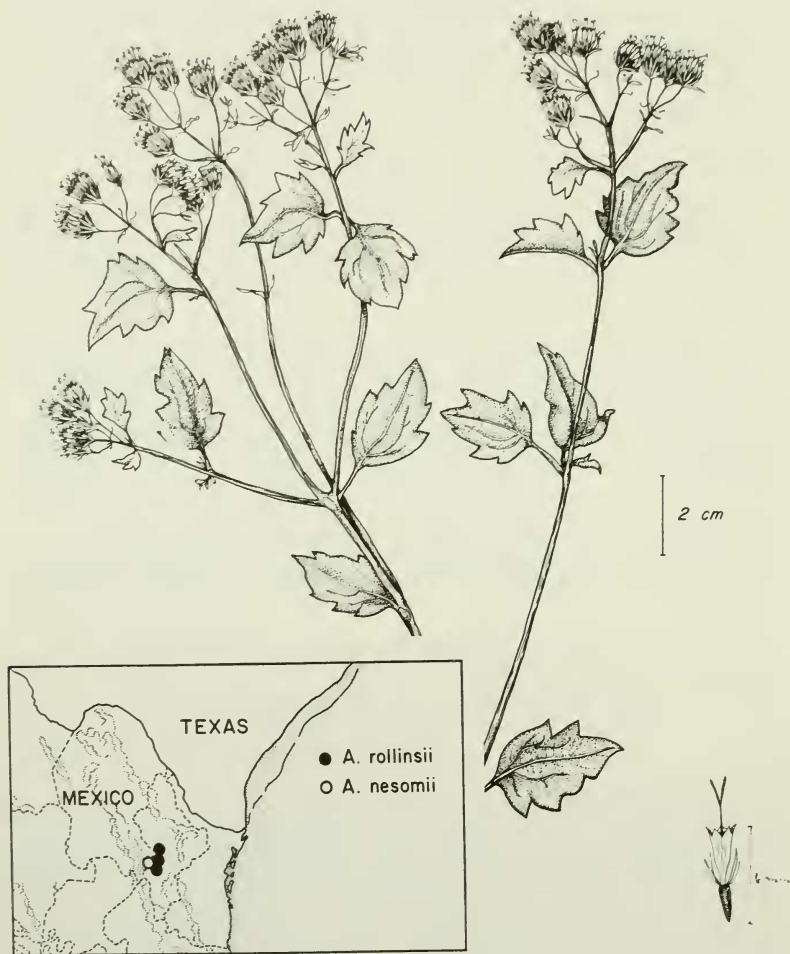
ADDITIONAL COLLECTIONS: NUEVO LEON: carretera 51, 4.1 km al SW de Pablillo, 16.6 km al S del entronque de carretera 51 con 58, 29 Jul 1982, C. P. Cowan 3767 (TEX, UNAM); ca. 1 mi W of Itebide along highway 58, 23 Oct 1981, Dorr et al. 2040 (TEX).

Ageratina rollinsii is superficially similar to A. nesomii, especially in habit. Both are perennial herbs with ovate-deltoid, coarsely dentate, leaves which become alternate about 2/3 way up the main stem, just below the capitulescence. Their heads, and floral structures, however, are strikingly different. Nevertheless, the two taxa are probably closely related and are not readily grouped with yet other species of the large genus Ageratina as conceived by King and Robinson (1970, 1972), although both can be accommodated within the subgenus Neogrenella somewhere near the species centering about A. herbacea and A. rothrockii as noted above.

It is a pleasure to name the species for Dr. Reed C. Rollins, Professor of Botany, Harvard University, who participated in its initial collection.

#### References

- King, R. M. and H. Robinson. 1970. Studies in the Eupatorieae (Compositae) XIX. *Phytologia* 19: 208-229.  
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FIG. 1. AGERATINA ROLLINSII

[FROM HOLOTYPE]